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Weekly Letter

Deficits and Monetary Growth

For a decade or more, the United States has experienced persistingly large federal deficits —and persistingly high rates of monetary growth. The data presented in this *Weekly Letter* show that the high monetary-growth rates were attributable to factors controlled by the U.S. monetary authorities.

Accelerated monetary growth relative to real output growth accompanied the rising trend of budget deficits in the 1960s and especially the 1970s, as can be seen from the rising trend of the peak-to-peak cycle averages over that period (see charts). Earlier, deficits during cyclical contractions had largely been offset by surpluses during expansions. It should be noted that monetary growth has tended to be lower during contractions than expansions—just the opposite of the cyclical variation in the deficit. That observation has recently led some economists to deny any strong association between deficits and monetary growth in the post-World War II period. The charts indicate that they've missed the big picture, however, insofar as both monetary growth and deficits were high in the 1970s.

Sources of monetary growth

We can better understand the reasons for the increased monetary growth of the 1970s by decomposing that aggregate into its components. By definition, M-1B equals a money multiplier times the monetary base; and the latter equals the sum of a noncontrolled and a controlled component. The noncontrolled part equals the amount accountable to such factors as Federal Reserve discounts and advances, Federal Reserve float, and other Federal Reserve assets net of holdings of government securities and liabilities. The controlled part consists of two elements. One is fiat money—the amount of the monetary base that results from Federal Reserve purchases of government securities plus the Treasury's issuance of currency and coin (net of Treasury holdings of deposits and currency). The other element is the required-reserve adjustment, which is the change in the monetary base needed to offset changes in required-reserve ratios as set by Federal Reserve regulations.

Thus changes in the quantity of money can be attributed to (1) changes in the noncontrolled and controlled amounts of the monetary base for a given multiplier, (2) changes in the money multiplier for a given amount of the monetary base, and (3) the interaction between changes in the multiplier and changes in the monetary base. Altogether, changes in the monetary base more than accounted for changes in money in 1980 and in the 1970-80 decade as a whole (see table). Further, most of the increase in the monetary base came from controlled sources, although noncontrolled sources also played a part.

Money multiplier and base effects

The money multiplier declined both in 1980 and over the 1970-80 period as a whole. This decline reflected the decade's sharp rise in interest rates, which induced depositors and banks to shift funds from the kinds of money included in M-1B—characterized by comparatively low interest rates and high required reserve ratios—to higher-yielding and lower-reserve-absorbing categories. (A shift of deposits from high- to low-reserve categories might appear to increase the multiplier, but these deposits technically become non-money when they leave M-1B, while the required reserves against these deposits remain in the monetary base.) In any event, high rates of monetary growth during the 1970s cannot be attributed to the movements of the multiplier. The multiplier's decline, in itself and in combination with changes in the monetary base, would have reduced M-1B by $24.7 billion in the 1970-80 decade and by $10.1 billion in 1980 alone.

The monetary base, meanwhile, accounted for $35.4 billion of M-1B growth in 1980, and for $254.3 billion of its growth over the 1970-80 decade. Controlled sources accounted for

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70 percent of its increase in 1980 and 87 percent in 1970-80. In 1980, $18.5 billion of the $24.7-billion (controlled-factors) increase was due to the substantial reduction in required-reserves ratios that occurred under the Monetary Control Act of 1980. The balance of $6.2 billion was mainly due to Federal Reserve purchases of government securities, which increased the fiat monetary base. Over the 1970-80 period, reduced required-reserve ratios contributed only $15.1 billion to the (controlled factors) increase in M-1B, the remaining $206.8 billion resulting from increases in the fiat monetary base.

Thus increases in the fiat monetary base were by far the most important factor responsible for the $204.6-billion M-1B increase of the 1970-80 decade—and 94 percent of that increase resulted from Federal Reserve purchases of U.S. Treasury and Federal Agency securities. Overall, 98 percent of 1980's M-1B increase, and 109 percent of the 1970-80 increase, came from factors controlled by monetary authorities. Increases in noncontrolled sources of the base thus contributed very little to M-1B growth.

Controlling the controllable

Such observations prompt critics of U.S. monetary policy to recommend greater control over the controllable sources of the monetary base, for the purpose of limiting variation in growth rates of the total monetary base and of broader monetary aggregates such as M-1B. The authorities, at least until October 1979, apparently were influenced not only by the objective of limiting variations in monetary growth and inflation, but also by other objectives such as curbing the high interest rates associated with financing persistent federal budget deficits. But this attempt evidently backfired, inasmuch as the inflation that resulted from the deficits and the accelerated monetary growth caused interest rates to rise rather than fall.

Can we avoid a repeat of our 1970-80 experience? The answer is probably yes. Even if prospective federal deficits can't be eliminated, they can be financed mainly by Treasury sales of securities to private investors and foreign investors—rather than to the Federal Reserve. If the Federal Reserve does not monetize the debt, monetary growth can be curbed and inflation can be brought

Controlled and Noncontrolled Sources of Change in M-1B

	1980		1970-80	
	Billions of Dollars	Percent Change	Billions of Dollars	Percent Change
Change in M-1B Due To:				
Fiat Monetary Base	+6.2	+1.5	+206.8	+93.4
Required Reserve Ratios	+18.5	+4.6	+15.1	+6.9
Controlled Sources	+24.7	+6.1	+221.9	+100.3
Noncontrolled Sources	+10.7	+2.7	+32.4	+14.7
Monetary Base Adjusted	+35.4	+8.8	+254.3	+115.0
Multiplier*	−10.1	−2.5	−49.7	−22.6
Change in M-1B	+25.3	+6.3	+204.6	+92.4
Percent Due to Controlled Sources	97.6		108.5	

*Includes interaction between multiplier and monetary base adjusted.

down in the United States—just as it has been in other countries that have financed large government deficits without rapid rates of monetary growth and accelerating inflation.

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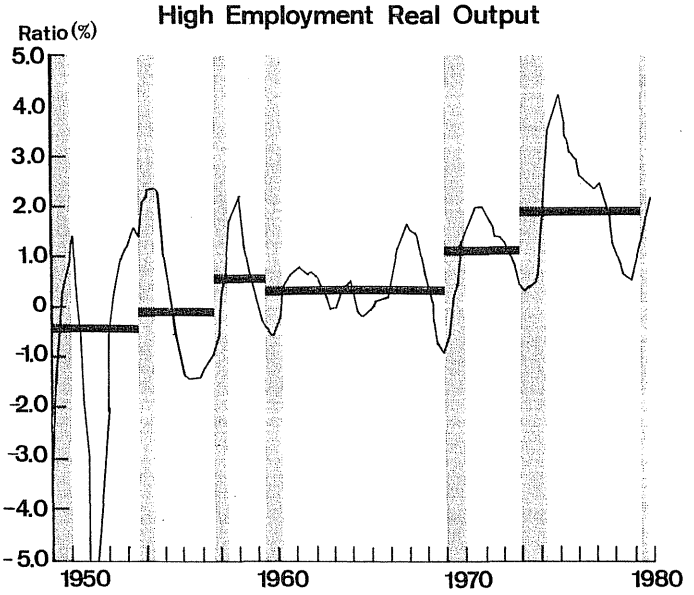
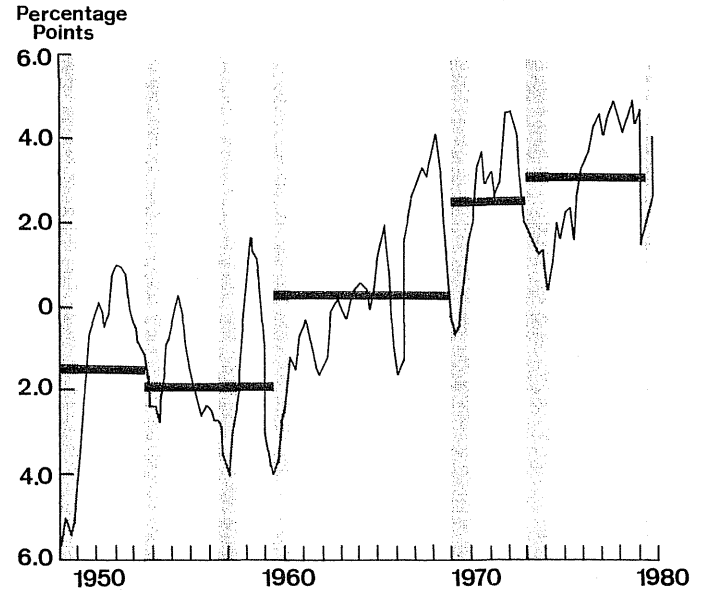
Ratio of Federal Deficit and High Employment Real Output



Money (M1B) Growth Less Real Output Growth



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BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT

(Dollar amounts in millions)

Selected Assets and Liabilities Large Commercial Banks	Amount Outstanding 11/18/81	Change from 11/11/81	Change from year ago Dollar	Change from year ago Percent
Loans (gross, adjusted) and investments*	154,071	584	9,860	6.8
Loans (gross, adjusted) — total#	133,278	608	11,182	9.2
Commercial and industrial	39,998	161	3,991	11.1
Real estate	55,327	219	5,521	11.1
Loans to individuals	23,241	– 1	– 610	– 2.6
Securities loans	2,048	130	791	62.9
U.S. Treasury securities*	5,436	– 50	– 1,229	– 18.4
Other securities*	15,357	26	– 89	– 0.6
Demand deposits — total#	40,478	46	– 5,061	– 11.1
Demand deposits — adjusted	27,763	– 31	– 4,820	– 14.8
Savings deposits — total	29,664	– 5	143	0.5
Time deposits — total#	86,285	855	18,018	26.4
Individuals, part. & corp.	77,840	522	18,625	31.5
(Large negotiable CD's)	33,029	557	6,559	24.8
Weekly Averages of Daily Figures	Week ended 11/18/81	Week ended 11/11/81	Comparable year-ago period	
Member Bank Reserve Position				
Excess Reserves (+)/Deficiency (–)	33	65	– 83	
Borrowings	16	142	245	
Net free reserves (+)/Net borrowed(–)	17	– 77	– 162	

* Excludes trading account securities.

Includes items not shown separately.

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